

Range extension, new state record and geographic distribution map of *Acratosaura mentalis* (Amaral, 1933) (Squamata: Gymnophthalmidae)

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ABSTRACT: We provide new records of *Acratosaura mentalis* from three localities in the state of Pernambuco, Brazil, these records extending the known geographical distribution of the species to the municipalities of Sertânia, Custódia and Floresta. We also report *A. mentalis* from the municipality of Mauriti, which is the first record for the state of Ceará, Brazil.

The gymnophthalmid genus *Acratosaura* currently comprises two species (Rodrigues *et al.* 2009): *A. mentalis* (Amaral, 1933) and *A. spinosa* Rodrigues, Cassimiro, Freitas and Silva, 2009. *Acratosaura mentalis* (Figure 1) was described by Amaral (1933) as *Colobosaura mentalis* based on specimens from the municipality of Vila Nova - now Senhor do Bonfim - state of Bahia, Brazil. *Colobosaura mentalis* was later allocated to the new genus *Acratosaura* by Rodrigues *et al.* (2007). The species is cryptic and semifossorial having a large but seemingly insular distribution (Rodrigues 2003; Rodrigues *et al.* 2007). *Acratosaura mentalis* is reported from some isolated areas in the Caatingas of northeastern Brazil, and in the Serra do Espinhaço, a large mountain range reaching 2400 m elevation that extends from the state of Minas Gerais to Bahia (Rodrigues *et al.* 2007). In addition to the type locality, its geographical distribution (based on records available from the literature) currently includes 23 localities in the states of Minas Gerais, Sergipe, Alagoas, Pernambuco, Paraíba and Rio Grande do Norte.

We provide four unpublished localities for *A. mentalis* in northeastern Brazil, three in the state of Pernambuco and one in Ceará (Figure 2), gathered during faunal rescues and monitoring plans for water dams in the framework of the São Francisco river water diversion work (designed to ensure water supply to about 12 million people in 390 municipalities in the states of Pernambuco, Ceará, Paraíba and Rio Grande do Norte, until 2025). Voucher specimens are deposited in the scientific collection of the Centro de Conservação e Manejo de Fauna da Caatinga (CEMAFAUNA-CAATINGA/UNIVASF) (IBAMA collecting permits: 042/2007 and 125.r/2010, Process nº 02001.003112/2007-12).

From January 2009 to May 2010, we collected specimens of *A. mentalis* in the state of Pernambuco at the following municipalities: Sertânia (N = 10: LC 449, 563, 1421, 2050, 2107, 2154, 2180, 2528, 2611, 2954; 08°04'14" S, 37°15'57" W; 558 m asl), Custódia (N = 12: LC

43, 44, 66, 204, 719, 797, 909, 976, 1027, 1041, 1111, 1294; 08°05'15" S, 37°38'35" W; 542 m asl) and Floresta (N = 17: LPE 166, 178, 180, 245, 613, 921, 940, 1032, 1048, 1203, 1331, 1333, 1487, 1489, 1500, 1822, 1823; 08°36'04" S, 38°34'07" W; 316 m asl). These three collection sites lie in the Caatinga and are characterized by shrub vegetation on a sandy soil. Our new findings of *A. mentalis* in the municipalities of Sertânia, Custódia and Floresta (Figure 3) extend the distribution of this species ca. 60 km north, 75 km northwest and 120 km west, respectively, from the nearest collection site in the municipality of Buíque, state of Pernambuco (Vale do Ipanema; 08°37'24" S, 37°09'23" W; 798 m asl). In Buíque, specimens of *A. mentalis* were collected in the Parque Nacional do Catimbau (Muniz and

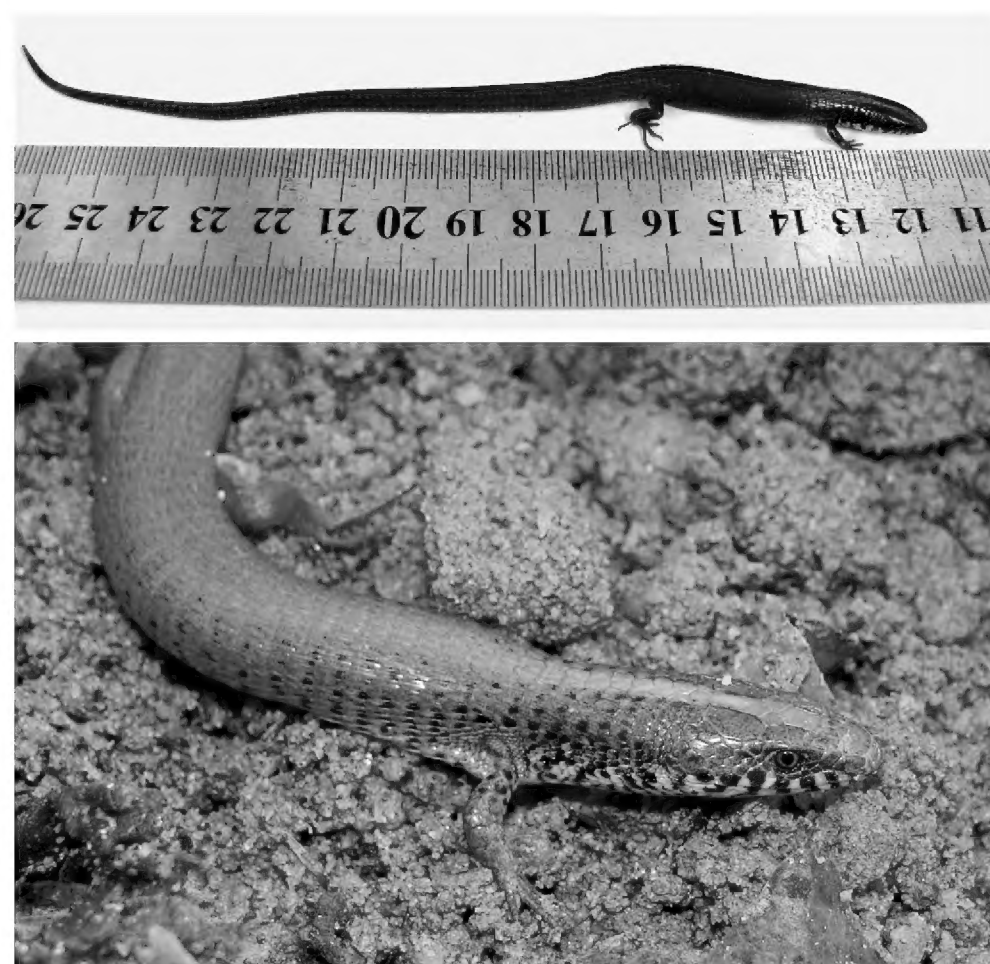


FIGURE 1. Specimen of *Acratosaura mentalis* (ca. 45 mm SVL) captured, photographed, and released in the municipality of Floresta, state of Pernambuco, Brazil. Photos (LPE 1786) by CEMAFAUNA-CAATINGA and Melissa Gogliath.

Santos 2009), where Muniz and Santos (2009) qualified their collection as accidental (less than 25% of all lizards observed/collected).

On 03 February 2010 in the state of Ceará, an additional adult specimen of *A. mentalis* was collected in the Caatinga in the municipality of Mauriti (07°23'20" S, 38°46'26" W; 374 m asl). That specimen was photographed and released at the site of capture (not illustrated because of poor quality of the photograph). To the best of our knowledge,

that photograph (catalogued NMA 665) is the first verifiable voucher of the occurrence of *A. mentalis* in the state of Ceará. This extends the geographical distribution of *A. mentalis* ca. 145 km north from the nearest record in the state of Pernambuco, in the municipality of Floresta (Figure 3). The new records reported here are an important contribution to the knowledge about the distribution and conservation of *A. mentalis* in the Caatinga region of northeastern Brazil.

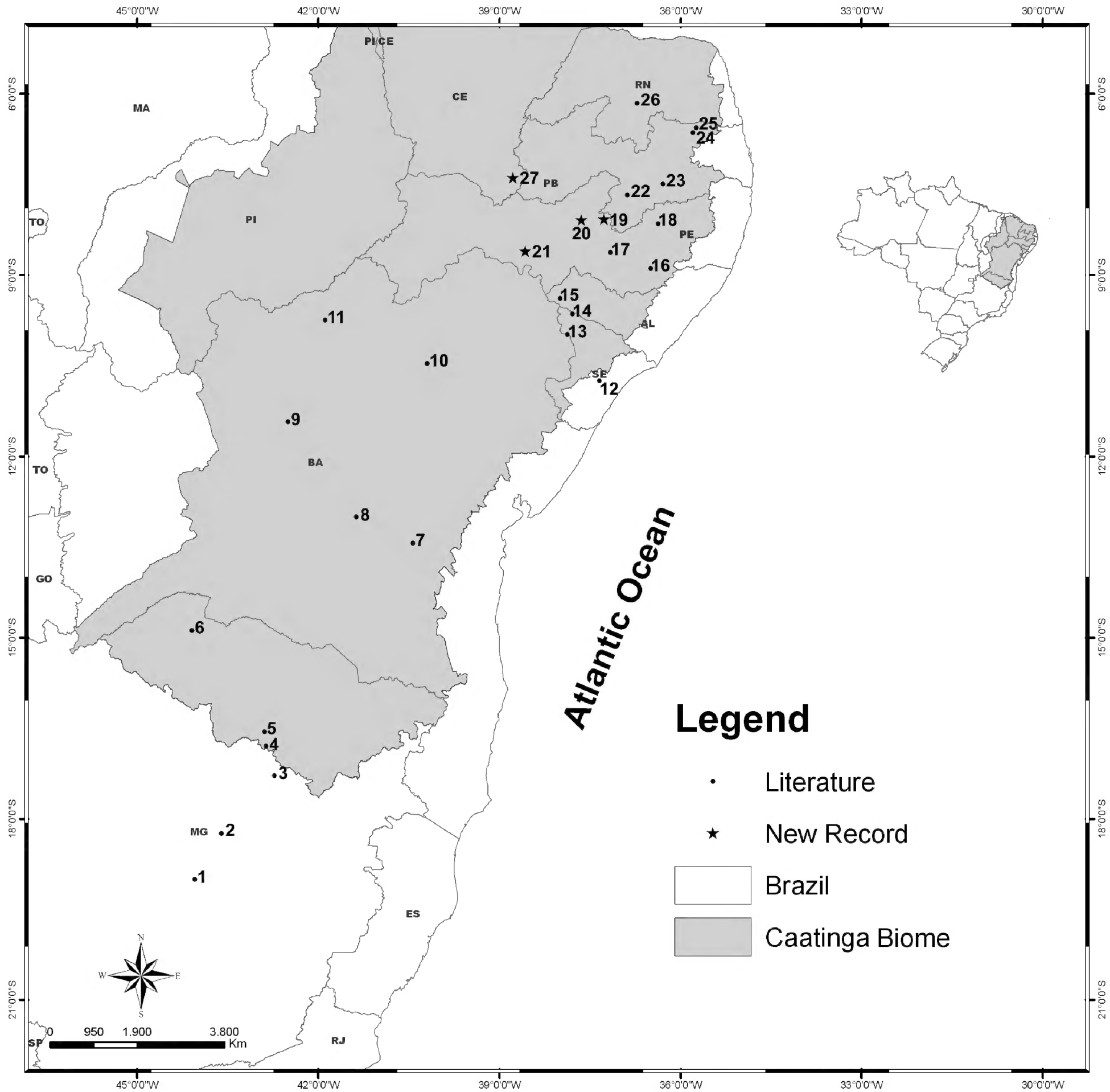


FIGURE 2. Geographic distribution of *Acratosaura mentalis*. Minas Gerais (MG): 1. Santana do Pirapama (Rodrigues *et al.* 2009), 2. Diamantina (Rodrigues *et al.* 2009), 3. Turmalina (Rodrigues *et al.* 2009), 4. Cristália (Rodrigues *et al.* 2009), 5. Grão Mogol (Rodrigues *et al.* 2009), 6. Parque Nacional do Peruacu (Rodrigues *et al.* 2009); Bahia (BA): 7. Maracás (Rodrigues *et al.* 2009), 8. Mucugê (MZUSP 74223), 9. Santo Inácio (MZUSP 79743), 10. Senhor do Bonfim (Type-Locality, MZUSP 40084-5), 11. Sento Sé (Santos *et al.* 2008); Sergipe (SE): 12. Parque Nacional Serra de Itabaiana (De-Carvalho *et al.* 2010), 13. Serra da Guia (De-Carvalho *et al.* 2010); Sergipe/Alagoas (AL): 14. UHE Xingó (MZUSP 80182-3); Alagoas (AL): 15. Delmiro Gouveia (Rodrigues *et al.* 2009); Pernambuco (PE): 16. Garanhuns (MZUSP 65675), 17. Parque Nacional do Catimbau (Rodrigues and Santos 2008), 18. Brejo da Madre de Deus (Queiroz and Lema 1996), 19. Sertânia (New Record), 20. Custódia (New Record), 21. Floresta (New Record); Paraíba (PB): 22. São José dos Cordeiros and Sumé (Freire *et al.* 2009), 23. Cabaceiras (Rodrigues 1986), 24. Cacimba de Dentro (Arzabe *et al.* 2005), 25. Parque Estadual Pedra da Boca (Arzabe *et al.* 2005); Rio Grande do Norte (RN): 26. Tenente Laurentino Cruz (Gogliath *et al.* 2010) and Ceará (CE): 27. Mauriti (New Record).

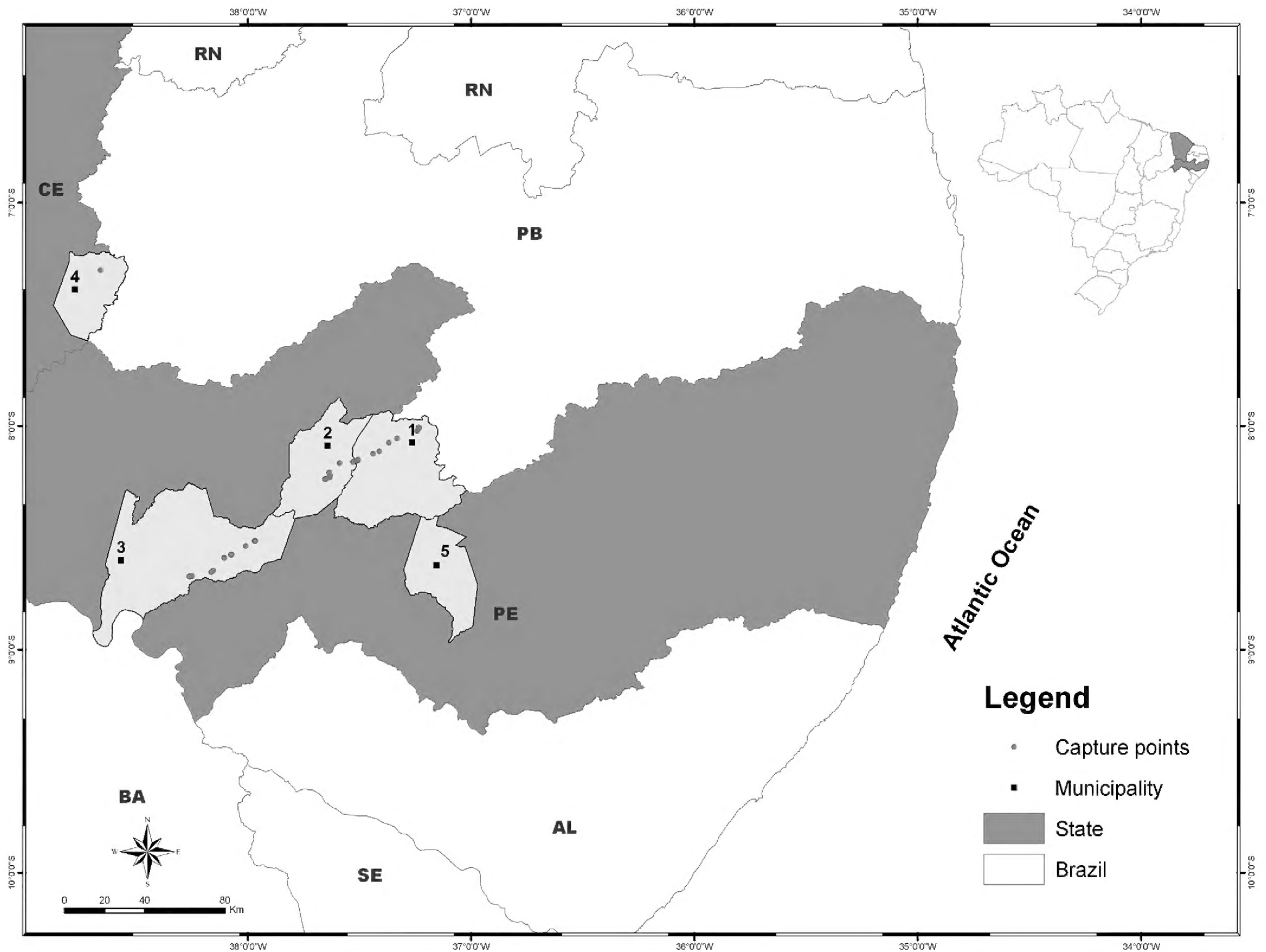


FIGURE 3. Map of northeastern Brazil showing the collection localities of *Acratosaura mentalis* here published for municipalities from Sertânia (1), Custódia (2) and Floresta (3), state of Pernambuco, and a single record from Mauriti (4), state of Ceará, Brazil. Number 5 represents the previous easternmost distributional record for the species in the municipality of Buíque, state of Pernambuco.

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